UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

JUL 16 2001

REPLY TO THE ATTENTION OF

MEMORANDUM SE-5J

DATE:

SUBJECT: **ACTION MEMORANDUM** - Request for a Time-Critical Removal Action at the J-Pitt Steel Melt Shop, Chicago, Cook County, Illinois
(Site ID #B5Y2)

FROM: Brad Benning, On-Scene Coordinator
Emergency Response Section II

TO: William E. Muno, Director
Superfund Division

THRU: Richard Karl, Chief
Emergency Response Branch

I. PURPOSE

The purpose of this memorandum is to document your verbal approval to expend up to $35,000, and to request an additional $527,200, totaling $562,200 to abate an imminent and substantial threat to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances located at the J-Pitt Steel Melt Shop Site at 3151 South California Ave., in Chicago, Cook County, Illinois (the 'Site'). The hazardous substances consist of heavy metals (lead, cadmium, and chromium); polychlorinated biphenyls (PCBs); friable materials; chemicals (acids, caustics, solvents); and low level radioactive sources (Cesium- 137).

The proposed response action will mitigate threats to public health, welfare, and the environment posed by the presence of uncontrolled hazardous substances at the Site. Proposed removal actions include, but are not limited to, the assessment and stabilization of chemical hazards at the Site, and the transportation and off-site disposal of the hazardous substances. The presence of hazardous substances located at the Site, the potential for migration off-site, the unrestricted access to the property, and the Site's proximity to surface water and commercial areas require that this removal be classified as time-critical. The project will require an estimated thirty 10-hour on-site working days to complete.

The Site is not on the National Priorities List ('NPL')

II. SITE CONDITIONS AND BACKGROUND

The CERCLIS ID number for the Site is ILN000508169

Site Description

1. Removal site evaluation

U.S. EPA conducted an emergency stabilization action and removal assessment at the Site between 4/5/01 and 4/19/01. An Emergency Rapid Response Service (ERRS), Response Manager was mobilized to the Site on 4/6/01 to provide assistance to the U.S. Army detail overseeing the removal of scrap military ordinance. Upon removal of the ordinance, the ERRS contractor and START contractor initiated stabilization and assessment activities. Over 300 containers were consolidated from various parts of the building which included various acids, caustics, oils, and solvents. Electrical capacitors were discovered, with a leaking unit containing 54,000 ppm of PCBs. Samples from the floors, primarily soil, dust, and ash, were collected throughout the facility and analyzed for total heavy metals. The highest levels detected included lead at 850 ppm; cadmium at 639 ppm; and chromium at 1310 ppm. The lead level detected in the baghouse dust was 1254 ppm. Pipe insulation observed throughout the facility had broken off and fallen to the floor, and appeared to be friable asbestos. Radioactive sources identified as Cesium-137 were also found at the site in four level indicator devices, and ten small needle-like items. Levels on the vessels were 130 microrem/hr, and on the needles as a group 4.5 milliroentgen/hr.

2. Physical location

The property is located at 3151 South California Avenue in Chicago, Cook County, Illinois. Coordinates for the site are latitude 41 degrees 50' 07" North and longitude 87 degrees 41' 42" West, as measured using a hand-held Global Positioning System (GPS) device. It is located in an industrial/commercial neighborhood with the Chicago Sanitary and Ship Canal directly adjacent to the southern perimeter.

U.S. EPA prepared a Region 5 Superfund Environmental Justice (EJ) analysis for the area surrounding the Site. This analysis is presented in Attachment IV. In Illinois, the low-income percentage is 27 and the minority percentage is 25. To meet the EJ concern criteria, the area within 1 mile of the Site must have a population that is twice the state low-income percentage and/or twice the state minority percentage. That is, the area must be at least 54% low-income and/or 50% minority. At this site, the low-income percentage is 94.8% and the minority is 85.3% as determined by Arcview or Landview III EJ analysis. Therefore, this site does meet the region's EJ criteria based on demographics as identified in Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998.

3. Site characteristics

The property known as J-Pitt Steel Melt Shop operated as a mini steel mill utilizing an electric arc furnace to produce steel billets. The facility had been purchased from Charter Manufacturing Co. in 1994, and operated until May of 1996 when their transformer failed and shut down production. The facility never resumed operation. J-Pitt's parent company filed for bankruptcy, and liquidated assets by 1998. The facility is roughly 800 feet by 300 feet, with three main sections; the furnace area, the billet finishing area, and the office, maintenance and receiving area. Chemical containers and raw products were located throughout the facility, with the majority of dust and ash located in the southern section by the furnace. Two baghouses are located on the facility, a four-unit silo inside the building and a twelve-unit silo outside at the southeast corner. The property is partially fenced, but easily accessible to trespassers.

4. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

Investigations at the site have determined that releases have impacted surface waters, and that potential future releases are likely due to the nature of hazardous substances in the facility and the deteriorated condition of the site.

5. Maps, pictures and other graphic representations

Please see Attachment IV

B. Other Actions to Date

1. Previous actions

U.S. EPA conducted an emergency stabilization action from April 6, 2001 thru April 19,2001. Activities included locating and consolidating drums and containers throughout the facility; removing oil sources from machinery and electrical rooms; installing a containment boom along the north canal bank; conducting a radiation survey; and sampling within the facility.

2. Current actions

U.S. EPA sent an AOC for the site to the PRP's and is negotiating the scope of work with them.

C. State and Local Authorities' Roles

1. State and local actions to date

The City of Chicago worked closely with the Army to facilitate the removal of the military ordinance, and provided board-up service for the west side of the building where trespassers were entering. The State has no plans to conduct or assist with any of the remediation activities at this time.

2. Potential for continued State/local response

The City of Chicago and State authorities do not have the financial resources to pursue removal actions.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A removal action is necessary at the J-Pitt Steel Melt Shop to abate the threat to public health, welfare or the environment posed by the release and potential release of hazardous substances. The NCP, 40 C.F.R. 300.415(b)(2), provides eight specific criteria for evaluating a threat and the appropriateness of a removal action. Observations documented during the Site investigation indicate that the Site meets the following criteria for a time-critical removal action:

a. Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants;

This factor is present at the Site due to the observed release of an oil based waste into the Chicago Sanitary and Ship Canal, the lack of a security that would minimize the risk of potential exposure to animals and humans, and the existence of containers, including approximately 124 55-gallon drums, 37 25-gallon and 5-gallon drums, and approximately 150 small containers of various chemicals and oils, located in the northern portion of the facility with potential exposures to nitric acid, hydrofluoric acid, hydrochloric acid, caustics, and solvents. Radioactive sources containing Cesium 137, located in the middle section of the facility pose a radiation hazard humans and animals. Resinous material, containing 54,000 ppm of PCBs, appeared to have spilled from a capacitor. Pieces of pipe insulation have fallen to the floor, and appear to be friable asbestos. Two baghouse units, one located inside the facility and the other outside along the canal, likely contain electric arc furnace dust (K061) a listed hazardous waste. Dust and ash observed on the floor, primarily in the furnace and billet finishing areas contain elevated levels of lead (854 ppm), cadmium (600 ppm detected by x-ray fluorescence), and chromium (1,310 ppm). Raw products on site are granular and powders containing silicates which pose an inhalation hazard.

Prolonged exposure to lead could result in kidney damage, anemia, and decreased fertility. Elevated lead exposure before or during pregnancy may cause birth defects. PCBs bioconcentrate in the tissues of animals and plants. The tissue concentrations can increase by orders of magnitude moving up the food chain from one

trophic level to the next. PCBs are extremely stable compounds and are slow to chemically degrade in the environment. PCBs elicit a variety of effects including skin lesions, wasting syndrome, immunotoxicity, reproductive toxicity, genotoxicity, and liver damage. The Site is unsecured and would be considered an attractive nuisance for children in the neighborhood.

b. Actual or potential contamination of drinking water supplies or sensitive ecosystems;

This factor is present at the Site due to the existence of an on-going release of oil to the canal along the Site's southern perimeter. The source appears to be from under the building structure in the vicinity of the electrical switch room. The large amount of dust and ash in the furnace area adjacent to the canal poses an additional source of contaminants to surface waters.

c. Hazardous substances or pollutants or contaminants in drums, barrels, tanks, or other bulk storage containers, that may pose a threat of release;

This factor is present at the Site due to the existence of numerous containers abandoned throughout the facility. Many containers are in poor condition resulting in spills throughout the facility; cubic-yard sacks and pallets of bags have broken open and released their contents. Hazardous substances observed include nitirc acid, hydroflouric acid, hydrochloric acid, caustics, various solvents and oils. The sixteen baghouse silos potentially contain electric arc furnace duct (K061) a listed hazardous waste. Resinous material, containing 54,000 ppm of PCBs, appeared to have spilled from a capacitor.

d. High levels of hazardous substances or pollutants or contaminants in soils, largely at or near the surface, that may migrate;

This factor is present at the Site due to the existence of dust, ash, and debris located in the southeast section of the facility which appeared to be the scrap steel storage area. Based on the current conditions in this area the nature of the floor could not be determined, the area may not have a concrete base. Contaminants potentially could impact soils in this area.

e. Weather conditions that may cause hazardous substances or

pollutants or contaminants to migrate or be released;

This factor is present at the Site due to the existence of numerous contaminants inside the facility which potentially could migrate due to structural issues with the building. Wind and precipitation events may allow contaminants to enter the canal and impact the surrounding area. Contaminants currently being retained by the sorbent boom in the canal may be released due to a significant precipitation event.

f. Threat of fire or explosion;

This factor is present at the Site due to the existence of flammable liquids and gases which were present inside the facility.

g. The unavailability of other appropriate federal or state response mechanisms to respond to the release;

This factor supports the actions required by this Order at the Site because State and local authorities lack the financial resources to address the threats to human health and the environment.

IV. ENDANGERMENT DETERMINATION

Given the current conditions at the Site and the nature of the hazardous substances on-site, actual or threatened releases of hazardous substances from this Site, if not addressed by implementing and completing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare, or the environment. The possibility of further releases of the hazardous substances present a threat to the nearby population and the environment via the exposure pathways described in Section III.

V. PROPOSED ACTIONS AND ESTIMATED COSTS

There are obvious time-critical elements present at the Site. The hazardous substances are located in an unsecured site, with signs of public trespass, located near industrial and residential areas, and must be immediately addressed. The proposed removal actions at the Site would eliminate the imminent and substantial threats to human health, welfare, or the environment, as outlined

in this memorandum.

The OSC proposes to undertake the following response actions to mitigate threats posed by the presence of hazardous substances at the Site:

a. Develop and implement a site-specific workplan including a proposed timeline;

b. Develop and implement a site-specific health and safety plan;

c. Provide site security measures which may include, but not be limited to, security guard service, fencing, and board-up services;

d. Stage, sample, and secure all Site wastes and residual materials, including but not limited to, wastes and materials in or from:
    (1) All 55-gallon drums and small containers;
    (2) Baghouse;
    (3) Pits, sumps, and tanks;
    (4) Bagged waste;
    (5) Radioactive materials; and
    (6) Friable asbestos from pipe wrap and other sources.

e. Overpack and secure leaking and deteriorated drums and other containers;

f. Conduct compatibility tests on liquids, sludges, solids, and other hazardous waste and substances;

g. Evaluate soils, dust, ash, and debris, and determine appropriate methods for stabilization and/or disposal, if necessary.

h. Develop and implement disposal arrangements for all radiation sources and contaminated debris;

i. Secure and investigate the source of oil release to the Chicago Sanitary and Ship Canal;

j. Arrange and effect transportation and disposal of all hazardous wastes, pollutants, and contaminants at an EPA-approved disposal facility;

k. Perform other actions to investigate contamination on the property that U.S. EPA may determine to be necessary; and

e. Take any response action to address any release or threatened release of a hazardous substance, pollutant, or contaminant which U.S. EPA determines may pose an imminent and substantial endangerment to the public health or the environment.

All hazardous substances, pollutants or contaminants removed off-site pursuant to this removal action for treatment, storage or disposal shall be treated, stored, or disposed of at a facility in compliance, as determined by U.S. EPA, with the U.S. EPA Off-Site Rule, 40 CFR 300.440, 58 Federal Register 49215 (Sept. 22, 1993).

The removal action will be taken in a manner not inconsistent with the NCP. The OSC has begun planning for provisions of post-removal site control, consistent with the provisions of Section 300.415(1) of the NCP. It is envisioned that after implementation of this removal action, there will be no need for post-removal site control.

All applicable and relevant and appropriate requirements ('ARARs') of federal and state law will be complied with, to the extent practicable. A federal ARAR determined to be applicable for the Site is the RCRA Off-Site Disposal Policy. A state ARAR determined to be applicable for the Site is the Subtitle G: Waste Disposal Regulations. Any additional federal and state ARARs will be addressed to the extent practicable.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants or contaminants at the Site which may pose an imminent and substantial endangerment to public health, welfare, or the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

The estimated costs to complete the above actions are summarized below. These activities will require an estimated thirty 10-hour on-site days to complete. Detailed contractor costs are presented in Attachment II.

REMOVAL PROJECT CEILING ESTIMATE

EXTRAMURAL COSTS

Cleanup Contractor Costs	$ 350,000
Contingency (20%)	70,000
Subtotal	$ 420,000
START Costs	25,000
Total Extramural Costs	$ 445,000
Extramural Contingency (20%)	89,000
TOTAL, EXTRAMURAL COSTS	**$ 534,000**

INTRAMURAL COSTS

U.S.EPA Direct Costs	
$30/hr x (300 Regional + 30 HQ)	$ 9,900
U.S.EPA Indirect Costs	
$61/hr x (300 Regional)	18,300
TOTAL, INTRAMURAL COSTS	**$ 28,200**
TOTAL, REMOVAL PROJECT CEILING	**$ 562,200**

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

A delay or inaction at the Site may result in an increased likelihood of direct contact to human populations by the hazardous substances. Since the Site is easily accessible, the various threats to human health and/or the environment pose a serious threat to the local population. Additionally, any delay or non-action will also increase the likelihood of migration of contaminants off-site into the surrounding commercial and residential neighborhood.

VII. OUTSTANDING POLICY ISSUES

No significant policy issues are associated with the the J-Pitt Steel Melt Shop site.

VIII. ENFORCEMENT

For administrative purposes, information concerning the enforcement strategy for this site is contained in the Enforcement Confidential addendum. (Attachment I)

IX. RECOMMENDATION

This decision document represents the selected removal action for the J-Pitt Steel Melt Shop site, located in Chicago, Cook County, Illinois, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site (see Attachment III). Conditions at the Site meet the criteria of Section 300.415(b)(2) of the NCP for a removal action, and I recommend your approval of the proposed removal action. The total estimated project ceiling, if approved will be $562,200. Of this, an estimated $509,000 may be used for cleanup contractor costs. You may indicate your decision by signing below.

APPROVE: _____ for WGM DATE: 7/16/01
Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Director, Superfund Division

Attachments: I. Enforcement Confidential addendum
II. ERRS Contractor Estimate
III. Administrative Record
IV. Region 5 Superfund EJ Analysis

cc: C. Stanton, U.S.EPA, OERR, 5202G
M. Chezik, U.S. Department of the Interior, **w/o Enf. Addendum**
B. Everetts, Illinois EPA, **w/o Enf. Addendum**
S. Davis, Illinois DNR, **w/o Enf. Addendum**

ENFORCEMENT ADDENDUM

J-PITT STEEL MELT SHOP SITE

HAS BEEN REDACTED
(2 PAGES)

NOT RELEVANT TO THE SELECTION OF THE REMOVAL ACTION

ATTACHMENT II
ERRS CONTRACTOR COSTS
JPITT MELT SHOP SITE

PERSONNEL	$73,770
EQUIPMENT	45,130
MATERIALS	59,500
TRANSPORTATION	11,000
DISPOSAL	160,000
TOTAL	**$349,400**

ATTACHMENT III

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

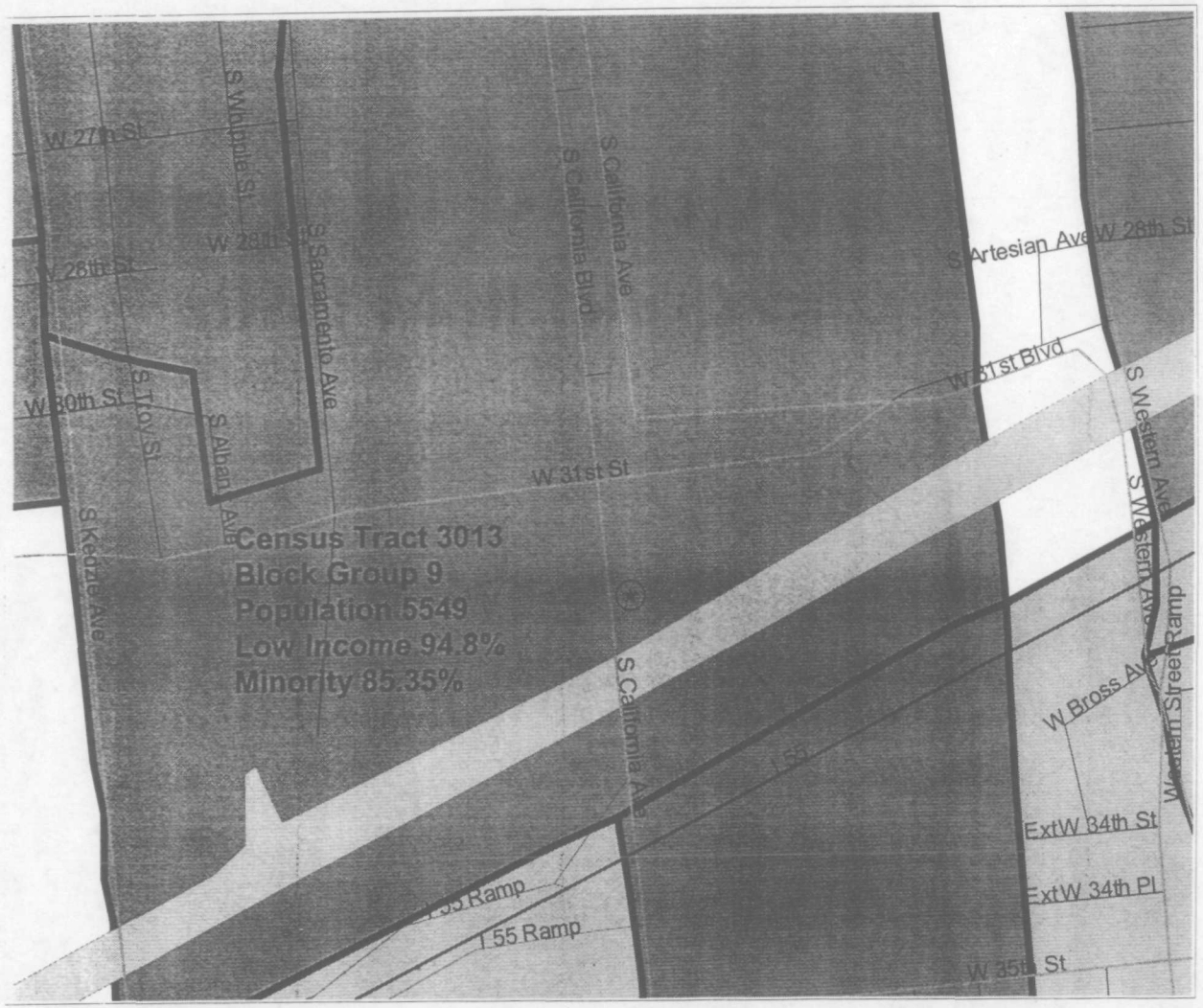
ADMINISTRATIVE RECORD
FOR
J-PITT STEEL MELT SHOP SITE
CHICAGO, COOK COUNTY, ILLINOIS

ORIGINAL
MAY 8, 2001

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	04/09/01	Gulcyzynski, A. & R. Muzzalupo, IDNS	Benning, B., U.S. EPA	Memorandum re: Radiation Survey for the J-Pitt Steel Melt Shop Site	15
2	04/16/01	Tetra Tech EM, Inc.	Benning, B., U.S. EPA	Analytical and Quality Control Reports for the J-Pitt Steel Metal Shop Site	1
3	04/17/01	Jensen, L. U.S. EPA	Benning, B., U.S. EPA	Memorandum re: Radiation Survey for the J-Pitt Steel Melt Shop Site	11
4	04/20/01	Ganz, J. IIT Research Institute	Benning, B., U.S. EPA	XRF Analyses for for J-Pitt Steel Melt Shop Site	2
5	05/02/01	Benning, B. U.S. EPA	Distribution List	POLREP #1 (Initial) for the J-Pitt Steel Melt Shop Site	3
6	00/00/00	Benning, B., U.S. EPA	Muno, W. U.S. EPA	Action Memorandum: Request for a Time-Critical Removal Action at the J-Pitt Steel Melt Shop Site **(PENDING)**	5

Region 5 Superfund EJ Analysis

JPitt Melt Shop Site Chicago, IL



EJ Identification

- Low Income and Minority Less than State Average
- Low Income or Minority at or Greater than State Average
- *Low Income or Minority 2 Times or Greater than State Average*
  [meets Region 5 EJ Case criteria]
- Site Location
- Block Group Boundary

Region 5 EJ Case Criteria for Illinois
Minority: 50% or greater
Low Income: 54% or greater

N

U.S. EPA Region 5
Superfund GIS

Date of Map: 4/26/01

Source of Map: 1990 Census Database